



Prizes

Prizes will be awarded to the top three winning teams in both the High School Division and College Division. Awards will go to the six registered team members and faculty/instructor advisor of each winning team.

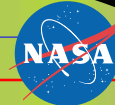
A prize will also be awarded to the team whose moonbuggy design represents the best technical approach toward solving the engineering problem of navigating the simulated lunar surface. The design award is based, not on moonbuggy race performance, but upon the technical approach taken by teams in their design.



NASA/Marshall Space Flight Center

Education Programs Department
Mail Code CD60
Huntsville, Alabama 35812
Phone (256) 544-5920
Fax (256) 544-8899

<http://www1.msfc.nasa.gov/education/moonbuggy>



Educational Program

Educators/Students

Grades 9-University

NASA/ Marshall Space Flight Center's

Great moonbuggy race



Huntsville, Alabama

The Great Moonbuggy Race, started in 1994 to commemorate the 25th Anniversary of the Apollo 11 lunar landing, is an annual event held each spring in Huntsville, Alabama.

Details For this competition, students design, build and race a vehicle that addresses a series of engineering problems. Vehicle requirements are modeled upon those faced by the original NASA Lunar Roving Vehicle (moonbuggy) team.



Each moonbuggy is human powered and carries two students, one female and one male, over a half-mile simulated lunar terrain course including “craters,” rocks, “lava” ridges, inclines and “lunar” soil.

Moonbuggy entries are expected to be of “proof-of-concept” and engineering test model nature, rather than final production models. As a part of the competition, and prior to course testing, the

un-assembled Moonbuggy entries must be carried to the course starting line, with the un-assembled components contained in a volume of 4’x 4’x 4’ (dimension requirements similar to those for the original Lunar Roving Vehicle). At the starting line, the entries will be assembled and readied for course testing and evaluated for safety.

The top three winning teams in each division (one high school division and one college division) will be those having the shortest total times in assembling their moonbuggies and traversing the terrain course. Each team is permitted two runs of the terrain course.



Poster & Video

Race posters and video are available for interested schools and to support team sponsorship development.



Web site More information and online registration for the race are available at the Great Moonbuggy Race website:

<http://www1.msfc.nasa.gov/education/moonbuggy>

A course map and description present the general course outline. Photos and QuickTime video are available by choosing specific obstacle descriptions.

Objectives In support of the NASA Strategic Plan, NASA’s Marshall Space Flight Center seeks to involve the educational community in our endeavors to inspire America’s students, create learning opportunities, and enlighten inquisitive minds.

College and university engineering programs may find participation in the Great Moonbuggy Race useful in meeting components of EC2000 criteria; those required for accreditation by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

